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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,428	05/19/2005	Peter Flamang	9031-1016	6041

466 7590 11/03/2006

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EXAMINER

HANAN, DEVIN J

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

NIT

<b>Office Action Summary</b>	<b>Application No.</b> 10/535,428	<b>Applicant(s)</b> FLAMANG ET AL.	
	<b>Examiner</b> Devin Hanan	<b>Art Unit</b> 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,7-10,14 and 15 is/are rejected.
- 7) ☒ Claim(s) 2,4-6,11-13 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/19/2005</u> | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 7-10 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Osumi (U.S. Patent 4,183,266).

Osumi discloses a gear unit (co. 1 line 35-36) for use in wind turbines (capable of being used in a wind turbine to increase torque or rpms) of the kind having an integrated main rotor bearing (bearing 26) and comprising a planetary gear stage (sun 16, planets 18, ring gear 29, carrier 17), the integrated main rotor bearing being adapted to provide location for the rotor hub relative to the wind turbine nacelle (the stationary housing is 11) and to locate the planet carrier relative to a low speed ring gear (29), wherein forces due to bending moments acting between the rotor hub and nacelle are transmitted substantially directly from the rotor hub to the nacelle via the main bearing and substantially none of the bending moments are transmitted to the nacelle via the ring gear of the planetary gear stage (bending force is transmitted from shaft 13 to bearing 26 to intermediate housing 12 to nacelle 11).

Regarding claim 3, Osumi discloses the outer ring of the main rotor bearing is secured to the nacelle (29 is secured to nacelle 11), and the rotor hub and planet carrier

are secured to the inner ring of the main bearing (the shaft, hub and carrier are supported by the inner ring).

Regarding claim 7, Osumi discloses the outer ring of the main bearing (26) is secured substantially directly to the nacelle (11) via a main bearing cover (29).

Regarding claim 8, Osumi discloses the main bearing (26) is secured substantially directly to the nacelle (11) via an intermediate housing (29).

Regarding claim 9, Osumi discloses the intermediate housing is secured directly to the nacelle or to the outer ring of the main bearing (29 is secured to 11 directly).

Regarding claim 10, Osumi discloses the planet gears lie axially displaced relative to the main bearing as considered in the direction of the axis about which the planet carrier rotates (planet gears 18 are aft relative to the main bearing 26).

Regarding claim 14, Osumi discloses the main bearing is provided with a seal pack (seal next to bearing 26) arranged to be selectively removable in situ from the main bearing (seal could be removed without disassembling entire structure).

Regarding claim 15, Osumi discloses the seal pack is displaceable axially relative to the main bearing (there is axial space between the seal and main bearing 26).

#### ***Allowable Subject Matter***

Claims 2, 4-6, 11-13 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Prior Art**


The patent to Schoo (U.S. Patent 6,459,165) is cited for its teaching of the usual arrangement of a planetary gearset in a wind turbine.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devin Hanan whose telephone number is 571-272-6089. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 571-272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
EDWARD K. LOOK  
SUPERVISORY PATENT EXAMINER  
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10/30/06

  
Devin Hanan  
Patent Examiner  
Art Unit 3745